# How to use **Technology Radars** to make transparent tech decisions

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Engineering Manager

# The new Engineering Manager...

# Why?

Raise your hand if you **questioned a technology choice** during your first weeks in an organization.

# How?

**How to easily grasp a dense technology landscape**

… and understand the why of certain choices?

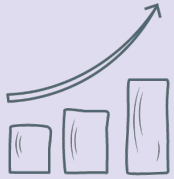# How to document technology decisions

… in a centralized and open place?
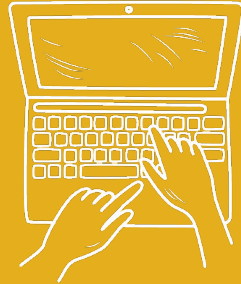
... and how about when

**the team is a community?**

Luckily, there is a fantastic tool available to address these **exact** challenges.

# The Technology Radar

# CHT Technology Radar for Contributors Version #4

**QUADRANT 1**    ZOOM IN

## Languages & Frameworks
Include development languages and more low-level development frameworks, which help implement custom software of all kinds.

**QUADRANT 2**    ZOOM IN

## Techniques
Include elements of a software development process, such as continuous integration, and ways of creating software, such as progressive web applications.

STOP    ASSESS    TRIAL    ADOPT    ADOPT    TRIAL    ASSESS    STOP

▲ New in this version

◆ Recently changed

● Unchanged

**QUADRANT 3**    ZOOM IN

## Platforms
There are things that we build software on top of, such as mobile technologies like Android or generic kinds of platforms like Amazon Web Services.

**QUADRANT 4**    ZOOM IN

## Tools
These can be components, like databases, software development tools, such as version control systems.

# Tools

## Tools

**ADOPT**

Android Studio

CouchDB

Docker

git

GitHub Actions

Gradle

Grafana

k3d

k3s

Kubernetes

Make

Nginx

npm

Postgres

Prometheus

SonarCloud

Superset

**TRIAL**

dbt

DOT

OpenTofu

**ASSESS**

HAProxy

**STOP**

couch2pg

Klipfolio

# Tools

TRIAL    ◔ Quadrant Overview

**dbt**

DOT

OpenTofu

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Legal Information

dbt **Edit**

TRIAL

dbt is an open-source tool and a commercial SaaS product that provides simple and effective transformation capabilities for data analysts.

dbt uses SQL to model simple batch transformations, while it provides command-line tooling that encourages good engineering practices such as versioning, automated testing and deployment; essentially it implements SQL-based transformation modeling as code. It currently supports multiple data sources, including PostgreSQL.

It the CHT context, dbt runs data tests and migrations for CHT Sync. Once CouchDB data is synchronized and stored in PostgreSQL with CHT Sync, it undergoes transformation using predefined dbt models from the cht-pipeline. dbt is used to ingest raw JSON data from the PosgtreSQL database and normalize it into a relational schema to make it easier to query.

You can find more details about CHT data synchronization tools in the related documentation.

Tags: "data"

Revisions:

ASSESS | SEPTEMBER 2023

It the CHT context, dbt is being evaluated for running data tests and migrations for cht-sync.
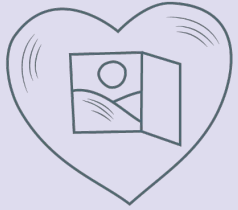
# The Undertaking

# Get **leadership** buy-in.

# Find the **right tool.**

**Use & customize open-source.**

# **Human-centered** design. Always.

**Build a culture of documenting technology choices.**

# Question established technologies.

# Look for innovation.

# Is it all worth the effort?

# The Good

**Valuable and fun conversations**

**Onboarding & hiring**

**Alignment**

**Tech stack skills coverage**

**Strengths and vulnerabilities**

# Did it solve the challenges?

# The **Four Lessons** Learnt

Building a technology radar is **straightforward**.
There are amazing **open-source** tools out there.

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**2** Building a **culture** of documenting technology decisions takes time.

**3** Encourage technology conversations **regularly** and **openly**. Document the **why** of every tech choice.

**1** Building a technology radar is **straightforward**. There are amazing **open-source** tools out there.

**2** Building a **culture** of documenting technology decisions takes time.

**3** Encourage technology conversations **regularly** and **openly**. Document the **why** of every tech choice.

**4** Be **patient** and **consistent**. Don't expect people to contribute overnight.

# Call for Action

How easy is it for new contributors to track technology decisions in your org or community?

# Thank You

docs.communityhealthtoolkit.org/contribute/tech-radar

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